

### **REMARKS**

The Office Action mailed July 25, 2008 has been received and the Examiner's comments carefully reviewed. Claims 1, 11 and 13-15 have been amended. Claims 3 and 6-10 have been withdrawn from consideration in a previous amendment. Entry of the amendment is requested. Upon entry, claims 1-2, 4-5 and 11-15 are pending in the application. Applicants respectfully submit that the pending claims are in condition for allowance.

#### **Support for the Amendment**

Claim 1 has been amended and recites that the outer edge of the inner section is coupled to the outer section only by a plurality of resilient members that extend from the outer section to the outer edge of the inner section. No new matter has been added. Support for the amendment can be found throughout the drawings and specification and at least on page 7 at lines 6-7 and on page 10 at lines 14-17.

Claim 11 has been amended and deletes the language directed to the actuator being annular for the purpose of clarifying antecedent basis. No new matter has been added.

Claims 13-15 has been amended for formalistic reasons only. No new matter has been added.

#### **35 U.S.C. § 102(e) Claim Rejections**

Claims 1, 2, 4-6, 11 and 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Litherland et al. (U.S. Patent No. 6,732,944). The rejection is traversed.

Claim 1 recites a fluid dispersion device comprising a substrate having inner and outer sections. The inner and outer sections of the substrate are coupled together only by a plurality of resilient members that extend from an inner edge of the outer section to an outer edge of the inner section.

Litherland et al. discloses in Fig. 9, 10 and 11 an aerosol generator that is constructed of a support element 112, which is used to hold a vibratable member 114 having a plurality of apertures. As shown in Fig. 10 support element 112 has a central aperture 116 across which vibratable member 114 is positioned and a circular outer periphery 118. Coupled to the support element 112 is a vibratable element 120 to vibrate vibratable member 114 when nebulizing a liquid. An isolating member 128 may be inserted about the outer periphery 118 as shown in Figs. 9 and 10. Tabs 126 are provided at the outer periphery 118 of the support element 112 to provide safe attachment of the isolating member 128 to the outer periphery 118 of support element 112.

The Office Action contends that tabs 126 are the equivalent of the resilient members of claim 1. This contention is incorrect for several reasons.

Tabs 126 do not extend from a substrate inner section outer edge to an outer section, as recited in claim 1. Rather, tabs 126 are "pressed or bent away from support element 112 to form a slot between tabs 126 and support element 112" (column 6 lines 54-57). As such, it is not physically possible for tabs 126 to extend from the outer periphery 118 of the support element 112. In other words, tabs 126 form part of the outer periphery and therefore cannot be characterized as extending from the outer periphery. As such, tabs 126 are not the equivalent of a plurality of resilient members and do not render the claim obvious.

Moreover, tabs 126 do not couple a substrate inner section outer edge to an outer section, as recited in claim 1. Rather, tabs 126 operate to couple support element 112 with isolating

member 128 in such a way that tabs 126 do not even contact outer periphery 118. Even if tabs 126 were characterized as coupling outer periphery 118 with isolating member 128, which Applicants do not concede, the elements would still not be coupled together only by the resilient members, as recited in claim 1. Rather, the bottom surface of support element 112 and tabs 126 must work in combination to retain isolating member 128. As such, tabs 126 are not the equivalent of a plurality of resilient members.

For at least the foregoing reasons, claim 1 is not anticipated by Litherland et al. Further, there no teaching, suggestion or motivation exists to modify Litherland et al. to arrive at the device recited in claim 1. Therefore, claim 1 is also not obvious over Litherland et al. Because claims 2, 4-5 and 11-15 ultimately depend from claim 1, they are patentable for the same reasons stated in support of claim 1. Withdrawal of the rejection is respectfully requested.

**35 U.S.C. § 103(a) Rejections**

Claims 12-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Litherland et al. in view of Berglund et al. The rejection is traversed.

Claim 12 depends from claim 1 and further specifies that at least one of the resilient members is adapted to carry an electric signal for the actuator. Claim 13 ultimately depends from claim 1 and further specifies that the substrate inner section is adapted to carry an electrical signal provided for a piezoelectric actuator via at least one resilient member. Claim 14 ultimately depends from claim 1 and further specifies that the substrate outer section is adapted to carry an electrical signal provided for a piezoelectric actuator via at least one resilient member.

Berglund et al. is directed to a vibrating monodisperse aerosol generator that uses a signal generator 41 to power a piezoelectric ceramic ring via 73 an electrical connection 76 to a flange 61A of flat top plate 61. Litherland et al. has been discussed previously.

As stated previously, claims 12-14 are patentable over Litherland et al. for at least the same reasons already stated in support of claim 1. Moreover, Berglund et al. fails to provide any additional teaching or suggestion that addresses the deficiencies already identified in Litherland et al. with respect to claim 1. Further, and as conceded in the Office Action, Litherland et al. fails to disclose a substrate that is adapted to carry an electric signal. Although Berglund et al. may disclose a flat top plate 61 constructed to carry an electric signal; there is no teaching or suggestion in Berglund et al. relating to carrying an electric signal across a resilient member of a substrate, as recited in claims 12-14. As such, Litherland et al. and Berglund et al. cannot be combined to arrive at the device recited in claims 14. Therefore, claims 12-14 are not rendered obvious by a combination of Litherland et al. and Berglund et al. or any other prior art or combination thereof. Withdrawal of the rejection is respectfully requested.

### **SUMMARY**

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

U.S. Patent Application Serial No. 10/522,344  
Reply to Office Action dated July 25, 2008

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.



Date: \_\_\_\_\_

1/26/09

Respectfully submitted,

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A handwritten signature in dark ink, appearing to read "Gregory A. Sebold", written over a horizontal line.

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